UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 07, 2017

PC Code: 129140
DP Barcode: 439981

MEMORANDUM

SUBJECT: **Transfluthrin:** Data Evaluation Records for Two Environmental Fate Studies

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The Environmental Fate and Effects Division (EFED) has completed the review of two transfluthrin environmental fate studies, an aerobic aquatic metabolism study (MRID 50119705) and an indirect aqueous photodegradation (MRID 50119702) study. A third study on the chemical lifetime in the troposphere (MRID 50119707) was also submitted, considered as extraneous and was not reviewed. The aerobic aquatic metabolism study (MRID 50119705) is classified as **SUPPLEMENTAL**. The indirect aqueous photolysis study (MRID 50119702) is classified as **UNACCEPTABLE**. Table 1 includes a summary of the studies.

Table 1. Summary of transfluthrin environmental fate studies

Study Type (OCSPP Guideline)	Results	MRID and Classification	Comments
Aerobic aquatic metabolism ($t_{1/2}$) (835.4300)	13.5 SFO (20°C, water pH 8.7, sediment pH 6.5) 5.93 SFO (20°C, water pH 7.6, sediment pH 5.4)	50119705 Supplemental	First sampling was not done until 1 day posttreatment, at which time transfluthrin was only 73-74% of the applied. Sampling intervals were too wide to accurately record the concentrations of transformation products. Material balances dropped <90% at 100 days. LOD and LOQ were not reported.
Indirect Aqueous Photolysis (Non-guideline)	-	50119702 Unacceptable	The material balances and identity and quantity of transformation products were not reported. The details of the UV-irradiation and any dark controls were missing.

Study Type (OCSPP Guideline)	Results	MRID and Classification	Comments
Chemical Lifetime in Troposphere (Non-guideline)	-	50119707 Extraneous	This study is an extraneous submission and was not reviewed.

Submitted Studies

Hellpointner, E. 1993. Aquatic Metabolism of ^{14}C-Benfluthrin in an Aquatic Model Ecosystem. Unpublished study performed and sponsored by Bayer AG, Leverkusen, Germany; submitted by Bayer CropScience, Research Triangle Park, North Carolina. Study No.: M 151 0481-0. Experiment started October 5, 1992, and completed July 6, 1993 (p. 10). Final report issued July 14, 1993. MRID 50119705

Hellpointner, E.. 1991. Experiments of Concerning the Indirect Photodegradation of Benfluthrin in Aqueous Solution. Unpublished study performed, sponsored and submitted by Bayer AG, Leverkusen. Laboratory Study ID: 3467 HPO/046. Experiment start and end dates 9-12/1991. Final report issued Feb. 19, 1991. MRID 50119702

Hellpointner, E.. 2005. Transfluthrin: Calculation of the Chemical Lifetime in the Troposphere. Unpublished study performed, sponsored and submitted by Bayer AG, ES Global-CP, D-40789 Monheim, Germany. Study ID: N/A. Study Complete Date 3-09/2005. Final report issued March 9, 2005. MRID 50119707